CIVIL TECH LABS

Accredited by **NABL** as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer,
Yelahanka New Town Sub Division,
BBMP.

28th February 2016

Dear Sir,

Sub: Testing of Materials.

As requested, tests on physical properties were carried out for the Materials supplied by you, for the work of **'Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.'**

Please find the enclosed Test Report of the above.

Thanking You,
For Civil Tech Labs

Roopa.G

CIVIL TECH LABS BANGALORE

(ROOPA G.)
Lab Incharge

Dayanand AE

D AE

CIVIL TECH LABS

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT
TESTS ON REINFORCEMENT STEEL BAR 12 mm

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of the Agency	Sri. M. D. Srinivas.
Date of Testing	28/02/2016
Grade of Steel	Fe - 550

Sl.No.	Description	Result	IS 1786-2008 Min. Requirements	Remarks
1	Measured Diameter mm	12	12	Satisfactory
2	Wt/m Length (Kg/m)	0.889	0.888	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	9.7	8	Satisfactory
5	Yield Stress(N/Sq.mm)	559	550	Satisfactory
6	U T S (N/Sq.mm)	595	585	Satisfactory

Note:

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3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the customer.

Dayanand AE

Roopa.G
Lab Incharge
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TEST REPORT

TESTS ON REINFORCEMENT STEEL BAR 10mm

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of the Agency	Sri. M. D. Srinivas.
Date of Testing	28/02/2016
Grade of Steel	Fe - 550

Sl.No.	Description	Result	IS 1786-2008 Min. Requirements	Remarks
1	Measured Diameter mm	10	10	Satisfactory
2	Wt/m Length (Kg/m)	0.618	0.617	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	9.2	8	Satisfactory
5	Yield Stress(N/Sq.mm)	555	550	Satisfactory
6	U T S (N/Sq.mm)	590	585	Satisfactory

Note:

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Dayanand A.

Roopa. G
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TEST REPORT

TEST ON CEMENT

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of the Agency	Sri. M. D. Srinivas.
Date of Testing	28/02/2016

Tests	**Test Method As Per IS & Apparatus**		**Results**		**Requirements As Per IS 8112:1989**	**Remarks**
	IS Code	**Method**	**Value**	**Unit**		
Initial Setting Time	**IS-4031 (Part-5) 1988**	VICAT	50	min	Not Less Than 30 Minutes	Satisfies Requirement
Final Setting Time	**IS-4031 (Part-5) 1988**	VICAT	481	min	Not More Than 600 Minutes	Satisfies Requirement
Soundness	**IS-4031 (Part-3) 1988**	LE-CHATELIER	3	mm	Not More Than 10 mm	Satisfies Requirement

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TEST REPORT

GRADATION TEST ON FINE AGGREGATES

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Date of Testing	28/02/2016
Specific Gravity	2.55
Technical Reference	IS : 2386(Part I)–1963 (Reaffirmed 2011), IS : 2386 (Part III)–1963 (Reaffirmed 2011)

Sample	IS Sieve designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)				Grading Zone	Remarks
			ZONE-I	ZONE-II	ZONE-III	ZONE-IV		
River Sand	10	100	100	100	100	100	II	Satisfies the requirement
	4.75	98.3	90-100	90-100	90-100	95-100		
	2.36	81.4	60-95	75-100	85-100	95-100		
	1.18	72.4	30-70	55-90	75-100	90-100		
	0.6	45.8	15-34	35-59	60-79	80-100		
	0.3	23.6	5-20	8-30	12-40	15-50		
	0.15	8.4	0-10	0-10	0-10	0-15		

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Dayanand AE

Roopa.Y
Lab Incharge
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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 40mm ↓ Graded

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Date of Testing	28/02/2016
Specific Gravity	**2.68**
Water Absorption	**0.27%**
Technical Reference	IS : 2386(Part I)–1963 (Reaffirmed 2011), IS : 2386 (Part III)–1963 (Reaffirmed 2011)

IS Sieve Designation (mm)	**Sieve Analysis (% Passing IS Sieve)**	**Grading Requirement as per IS:383-1970 (Reaffirmed 2011)**	**Remarks**
80	**100**	100	**Satisfies the requirement**
40	**98.6**	95-100	
20	**53.2**	30-70	
10	**24.7**	10-35	
4.75	**4.1**	0-5	

Note:

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Dayanand AE

Roopa.Y
Lab Incharge
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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 20mm ↓ Graded

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Date of Testing	28/02/2016
Specific Gravity	2.64
Water Absorption	0.31%
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2011), IS : 2386 (Part III)-1963 (Reaffirmed 2011)

IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)	Remarks
40	100	100	Satisfies the requirement
20	97.4	95-100	
10	42.6	25-55	
4.75	7.4	0-10	

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Roopa. G
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T-2654

To,

Assistant Executive Engineer
Yelahanka New Town Sub Division,
BBMP Bangalore.

16th March 2016

Dear Sir,

Sub: Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Testing of cubes – Reg.

As requested the 07th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

Khushboo

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Quality Manager

Dayanand AE

CIVIL TECH LABS

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Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm²)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	Sample-1	150.18 X 150.16 X 150.0	22551	09/03/2016	16/03/2016	7	8.18	350	**15.56**	**15.32**
2		150.20 X 150.23 X 150.0	22565				8.22	336	**14.93**	
3		150.19 X 150.22 X 150.0	22562				8.23	348	**15.47**	

Note:

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Dayanand AE

Lab Incharge
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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm²)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	Sample-2	150.12 X 150.16 X 150.0	22542	09/03/2016	16/03/2016	7	8.16	344	**15.29**	15.47
2		150.18 X 150.15 X 150.0	22550				8.19	348	**15.47**	
3		150.17 X 150.19 X 150.0	22554				8.20	352	**15.64**	

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm²)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	Sample-3	150.11 X 150.14 X 150.0	22538	09/03/2016	16/03/2016	7	8.19	342	15.20	15.35
2		150.15 X 150.13 X 150.0	22542				8.20	346	15.38	
3		150.17 X 150.19 X 150.0	22554				8.21	348	15.47	

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm²)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	Sample-4	150.10 X 150.13 X 150.0	22535	09/03/2016	16/03/2016	7	8.17	330	14.67	14.87
2		150.16 X 150.14 X 150.0	22545				8.19	336	14.93	
3		150.15 X 150.17 X 150.0	22548				8.22	338	15.02	

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TEST REPORT
COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka New Town Sub Division, BBMP
Name of Work	Improvements to roads and drains at Chikkabommasandra in ward no. 04, Yelahanka New Tow Sub Division.
Name of Agency	Sri. M. D. Srinivas.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm²)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	Sample-5	150.17 X 150.14 X 150.0	22547	09/03/2016	16/03/2016	7	8.18	340	15.11	15.20
2		150.16 X 150.19 X 150.0	22553				8.19	342	15.20	
3		150.21 X 150.23 X 150.0	22566				8.20	344	15.29	

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